

**BY ORDER OF THE COMMANDER
90TH MISSILE WING**

90TH MISSILE WING INSTRUCTION 32-301

26 FEBRUARY 2013



Civil Engineering

**EXCAVATION AUTHORIZATION
PROCEDURES**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Lt Col Travis K. Leighton)

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This instruction establishes guidelines for protecting underground utilities, sensitive environments, historic and outlying facilities at Francis E. Warren Air Force Base. It applies to 90th Missile Wing, 20th Air Force, associated and tenants units assigned, attached, or supported by the 90th Missile Wing, Francis E. Warren Air Force Base. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://my.af.mil/afirms/afirms/afirms/rims.cfm>. Comply with AFI 33-332, Privacy Act Program, for documents containing privacy act information. Comply with AFI 31-401, *Information Security Management* for documents containing For Official Use Only information. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route the AF Form 847 from the field through major command (MAJCOM) publications/forms managers. See Attachment 1 for a glossary of references and supporting information.

SUMMARY OF CHANGES

This publication includes numerous changes and must be completely reviewed to note revisions.

1. Excavation. The term excavation is defined as any operation in which earth, rock or other materials on or below the ground is moved or otherwise displaced by means of hand tools, power tools, power equipment, explosives or other means, and includes grading, trenching, digging, ditching, drilling, auguring, tunneling, boring, plowing-in, pulling-in, ripping, scraping and cable or pipe installing.

2. Focal Points.

2.1. Base Civil Engineer Customer Service Unit, 90 CES/CEOSC, Building 318, 773-3175, is the focal point for processing all base and associated missile sites AF IMT 103, 19940801, V3, *Base Civil Engineer Work Clearance Request* (90 CES/CEOSC Overprint). (See **Figure 1.**)

Figure 1. Sample AF IMT 103, Base Civil Engineer Work Clearance Request (90 CES/CEOSC Overprint).

CE Permit # _____		* PLEASE NOTE ATTACHED COLOR CODE CHART	
BASE CIVIL ENGINEER WORK CLEARANCE REQUEST (See Attached Instructions)			Date Prepared _____
1. Clearance is requested to proceed with work at _____ on Work Order No. _____ Contract No. _____ involving excavation or utility disturbance per attached sketch. This area <input type="checkbox"/> has <input type="checkbox"/> has not been staked or clearly marked.			
		ONE CALL # _____	DATE: _____ TIME: _____
2. TYPE OF FACILITY/WORK INVOLVED			
A. PAVEMENTS	D. FIRE DETECTION & PROTECTION SYSTEMS	G. AIRCRAFT OR VEHICULAR TRAFFIC FLOW	
B. DRAINAGE SYSTEMS	E. UTILITY OVERHEAD UNDERGROUND	H. SECURITY	
C. RAILROAD TRACKS	F. COMM OVERHEAD UNDERGROUND	I. OTHER	
3. DATE CLEARANCE REQUIRED _____		4. DATE OF CLEARANCE TERMINATION _____	
5. SIGNATURE OF REQUESTING OFFICIAL _____		6. TELEPHONE NO. _____	7. ORGANIZATION _____
ORGANIZATION		REMARKS (Use Reverse for additional comments)	REVIEWER'S NAME AND INITIALS
BASE CIVIL ENGINEER	A. ELECTRICAL DISTRIBUTION	ELECTRIC IN AREA CALL 3743 TO SCHEDULE LOCATES	
	B. STEAM DISTRIBUTION	HI-TEMP IN AREA CALL 3302 TO SCHEDULE LOCATES	
	C. WATER DISTRIBUTION		
	D. POL DISTRIBUTION	UTILITIES IN AREA CALL 2792 TO SCHEDULE LOCATES	
	E. SEWER DISTRIBUTION		
	F. ENVIRONMENTAL/HISTORICAL	ENVIRONMENTAL IN AREA CALL 4147 TO SCHEDULE LOCATES	
	G. FIRE PROTECTION	CALL 3175 PRIOR TO BLOCKING ANY ROADWAYS	FIRE DEPARTMENT
	H. CATHODIC PROTECTION	CATHODIC IN AREA CALL 3743 TO SCHEDULE LOCATES	
	I. EMCS	CABLE IN AREA CALL 2485 TO SCHEDULE LOCATES	
	J. STORM WATER	P&E IN AREA CALL 2049 TO SCHEDULE LOCATES	
9. HIGH WEST ENERGY			
10. SAFETY		OK	SEG
11. COMMUNICATIONS		CABLE IN AREA CALL 6613 or 6117 TO SCHEDULE LOCATES	
12. ENGINEERING		VERIFY ALL UTILITIES THROUGH DRAFTING MAPS	CEP
13. CABLE TV			
14. COMMERCIAL UTILITY COMPANY			
<input type="checkbox"/> TELEPHONE/ Century Link <input type="checkbox"/> GAS/ CLFP <input type="checkbox"/> ELECTRIC/ CLFP <input type="checkbox"/> B.O.P.U.			
GROUNDS MAINT/IRRIGATION IN AREA CALL 256-0591 TO SCHEDULE LOCATES _____ 15. OTHER (Specify) AT&T Communications: _____ WYDOT: _____ Level 3 Communications: _____			
16. REQUESTED CLEARANCE <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED			
17. TYPED NAME AND SIGNATURE OF APPROVING OFFICER (Chief of Operations Flight or Chief of Engineering Flight)			18. DATE SIGNED
AFIMT 103, 19940801, V3			OVERPRINT 90 CES/CEOSC-103

2.2. Communications Help Desk, 90th Communication Squadron, 773-4545, is the coordination focal point for all underground communications lines.

2.3. Combined underground location service (Wyoming One-Call) is the coordination focal point for commercial utility and off-base commercial telephone companies. All Wyoming One-Call requests will be made by the Base Civil Engineer's Customer Service section. Individuals and contractors must not call Wyoming One-Call for locates (with the exception of associated missile sites, see 3.1.1.).

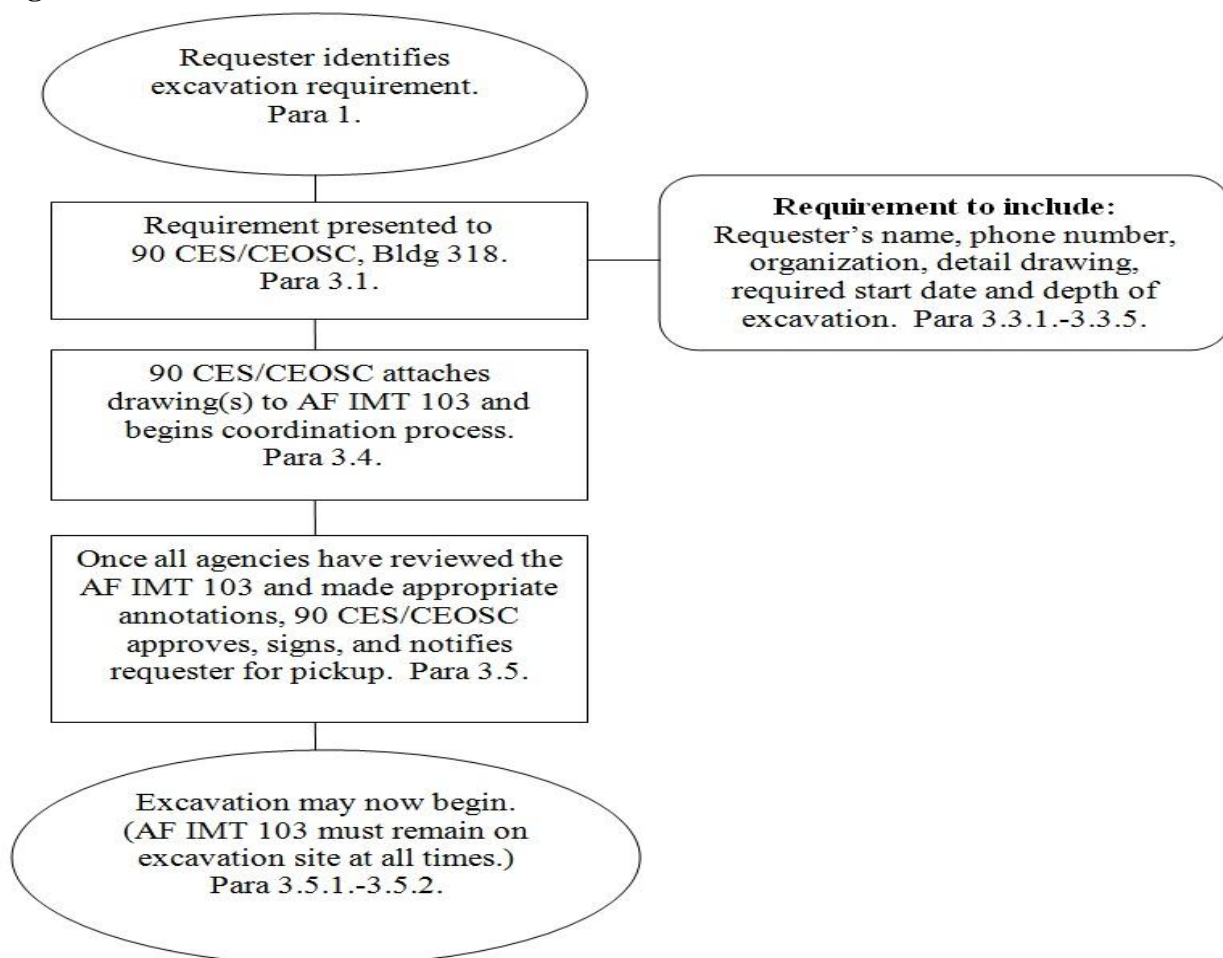
3. Procedures.

3.1. Excavators must identify dig area with white paint or flags prior to submitting dig requests. All requests for digging on F. E. Warren AFB and the associated missile sites will be submitted to the Base Civil Engineer's Customer Service section.

3.1.1. At associated missile sites, it is the sole responsibility of the inspector/requester to contact local utility companies and arrange a meeting at the excavation site with the locator to verify the exact location of utilities.

3.2. Coordinating AF IMT 103 Overprint (OP): (**See Figure 2**). The Base Civil Engineer's Customer Service section will contact all required base agencies for coordination and call Wyoming One-Call for the requester. Wyoming One-Call in-turn notifies the proper off-base agencies.

Figure 2. Coordination Process of AF IMT 103:



3.2.1. Agencies required for coordination/completion of AF IMT 103 are:

- 3.2.1.1. 90 CES utilities, pavement and equipment shops.
- 3.2.1.2. Base Heat Plant
- 3.2.1.3. 90 CES Environmental/90 MW/EM.
- 3.2.1.4. Base Cable/Communications (includes Visual Imagery and Intrusion Detection Systems when locating for the WSA).
- 3.2.1.5. Wyoming One-Call (includes Century-Link Communications, Cheyenne Light, Fuel and Power (CLFP) locating natural gas lines, Cheyenne Public Works, High West Energy, and local cable companies).
- 3.2.1.6. US Grounds Maintenance Contractor (SKILS-KIN).
- 3.3. Requesters must provide the following information, when submitting a digging permit request:
 - 3.3.1. Name, phone number and organization/business of the requester.
 - 3.3.2. Purpose of the excavation.
 - 3.3.3. Date excavation is expected to commence.
 - 3.3.4. A drawing of the excavation area.
 - 3.3.5. Depth of excavation.
 - 3.3.6. Ensure proposed excavation site is physically marked with white paint or flags.
- 3.4. 90 CES/CEOSC will attach guidelines, color code chart and drawing(s) to AF IMT 103 and begin coordination process.
 - 3.4.1. Each agency with utilities in the area of excavation, after marking the area, will annotate on the AF IMT 103 OP, “marked” and sign the form, completing their requirement for the dig permit.
 - 3.4.2. Areas of excavation that are clear of utilities, will be annotated “clear” and signed in the appropriate block for that agency.
- 3.5. Once all agencies have reviewed the AF IMT 103 OP and made the appropriate annotations, Base Civil Engineer’s Customer Service will approve and sign the AF IMT 103 OP, then notify the requester the form is ready for pick up at Building 318.
 - 3.5.1. When signed by 90 CES/CEOSC personnel, the form is valid for 14 calendar days and excavation may begin.
 - 3.5.2. Original signed AF IMT 103 OP or a copy of the signed original must remain on site at all times during excavation.
- 3.6. Requester must maintain all markings.
- 3.7. If work is to exceed the initial 14 calendar-days, the requester must renew digging permit for an additional 14 calendar days, if markings are maintained, through the Base Civil Engineer’s Customer Service section. The project manager must also initial permit, acknowledging all markings have been maintained.
- 3.8. Normal processing time for routine requests is 10 to 14 duty days.
- 3.9. Emergency requests required to correct conditions that are detrimental to the mission or reduce operational effectiveness are usually processed within a few hours. An emergency includes, but is not limited to, the total failure of the electrical, fire protection, telecommunications, heating and air conditioning or security alarm systems and situations which would result in imminent or catastrophic damage to facilities and/or persons.

4. Utility Marking Codes.

- 4.1. All utilities in the vicinity of the excavation will be physically located and marked with fluorescent paint using the following underground utility color codes:
 - 4.1.1. RED. Electric power lines, cables, conduits and lighting cables.

- 4.1.2. YELLOW. Gas, oil, steam, petroleum or gaseous materials.
- 4.1.3. ORANGE. Communications, alarm/signal lines, cables/conduit and CATV.
- 4.1.4. BLUE. Water, irrigation or slurry lines.
- 4.1.5. GREEN. Sewer and drain lines.
- 4.1.6. WHITE. Proposed excavation.
- 4.1.7. PINK. Reserved for surveying purposes only.
- 4.1.8. PURPLE. Reclaimed water, irrigation.

5. Responsibilities.

5.1. Requester must be the agency of primary responsibility for any excavation. Any individual, agency, or contractor must comply with all directives from the Base Civil Engineer.

5.2. Excavators are required to maintain a minimum clearance of 24 inches between the underground utility and the cutting edge or point of any power operated excavating or earth-moving equipment.

Note: If utility is not found within 24 inches of locate marks, immediately notify 90 CES for shop/contractor assistance on locating/identifying lines.

5.2.1. If excavation is required within 24 inches horizontally of any marking, the excavation should be performed using hand tools or vacuum excavation with extreme care and without damaging the marked utility.

5.2.2. If, during the course of excavation, a utility has been exposed, it is the excavator's responsibility to support these utilities. The excavator also must be certain the utilities have not been struck or damaged in any capacity, including being pulled or "kinked". **If damage of any kind is discovered, or if a utility is contacted, it is the excavator's responsibility to directly and immediately notify the Base Civil Engineer's Customer Service section (773-3175).**

5.3. Any excavation attempted without a proper approved digging permit may subject excavator to liability for reimbursement.

CHRISTOPHER A. COFFELT, Colonel, USAF
Commander, 90th Missile Wing

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Prescribed and Adopted Forms:

Prescribed Forms: No forms are prescribed by this publication.

Adopted Forms:

AF Form 847, *Recommendation for Change of Publication*, 22 September 2009

AF IMT 103, *Base Civil Engineering Work Clearance Request*, 11 March 2003